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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/749,585	12/28/2000	Ross Suydam Heitkamp	0023-0003	4840

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EXAMINER

HUYNH, KIM T

ART UNIT	PAPER NUMBER
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2112

DATE MAILED: 01/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/749,585

Applicant(s)

HEITKAMP, ROSS SUYDAM

Examiner

Kim T. Huynh

Art Unit

2112

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Smith (US Patent 6,629,178)

As per claims 1,8, 9,17,18, 23, 27, Smith discloses a system for selecting bus mastership in a multi-master system, comprising:

- a plurality of master devices configured to generate control signals relating to bus mastership in the multi-master system; and (col.4, line 66-col.5, line 20)
- at least one slave device configured to receive the control signals from the master devices, determine whether a conflict exists exits based on the control signals, generate one or more alternate control signals for selecting bus mastership when a conflict is determined to exist, and select bus mastership using the one or more alternate control signals. (col.3, line 34-43), (col.5, lines 21-34)

As per claims 2, 11, Smith discloses wherein at least one slave device comprises bus selection logic configured to determine whether the control signals indicate that two or more of the master devices concurrently assert bus mastership and generate a conflict indication signal when two or more of the master devices concurrently assert bus mastership, and conflict resolution logic configured to generate the one or more alternate control signals in response to the conflict indication signal. (col.5, lines 21-51), wherein terminate from low to high, implies master devices concurrently assert requests of bus mastership)

As per claims 3, 12, 19, Smith discloses wherein the one or more alternate control signals include a bus switch signal that indicates whether a change in bus mastership is to occur and a bus select signal that indicates which of the master devices is to be granted bus mastership. (col.5, lines 35-51)

As per claims 4, 13, Smith discloses wherein the at least one slave device includes bus selection logic configured to determine whether the control signals indicate that none of the master devices asserts bus mastership and maintain a previous bus mastership selection when none of the master device asserts bus mastership. (col.2, lines 18-26)

As per claims 5, 14, Smith discloses wherein the at least one slave device is further configured to select the bus mastership based on the control signals when no conflict is determined to exist. (col.5, lines 21-51)

As per claims 6, 20, 25, Smith discloses wherein the control signals include a present signal indicates whether a corresponding one of the master is operating

and a master signal that indicates whether a corresponding one of the master devices assert bus mastership. (col.5, lines 21-51), since arbitration terminate from low to high, it is inherently that there is indication whether master assert bus mastership include a present signal that indicates master is operating)

As per claims 7, 21, 26, Smith discloses wherein the control signals include a master signal that indicates whether a corresponding one of the master devices asserts bus mastership. (col.5, lines 21-51)

As per claim 15, Smith discloses wherein the control signals include a present signal that indicates whether a corresponding bus is operating and a master signal that indicates whether a corresponding bus is to be used. (col.5, lines 21-51), since arbitration terminate from low to high, it is inherently that there is indication whether master assert bus mastership include a present signal that indicates master is operating and being used)

As per claim 16, Smith discloses wherein the control signals include a master signal that indicates whether a corresponding bus is to be used. (col.5, lines 21-51)

As per claim 21, Smith discloses wherein the bus selection logic is further configured to select the bus mastership using the control signals when the control signals indicate that one of the master devices asserts bus mastership. (col.5, lines 21-51), wherein termination implies configured to select)

As per claim 24, Smith discloses wherein the one or more alternate control signals include a bus switch signal that indicates whether a change in bus

mastership is to occur and a bus select signal that indicates which of the master devices is to be granted bus mastership. (col.5, lines 21-51), wherein arbitration terminate from low to high implies bus switch signal when a change in bus mastership)

As per claim 28, Smith discloses a multi-bus system, comprising:

- a plurality of busses; (col.2, lines 7-10)
- a plurality of master devices corresponding to the busses, each of the master devices controlling a corresponding one of the busses, the master devices generating control signals that indicate which of the busses is an active bus; and (col.2, lines 7-41), (col.5, lines 21-51)
- a plurality of slave(target) devices connected to each of the busses and configured to receive the control signals, determine whether the control signals indicate that two or more of the busses are declared active busses, and select one of the busses when the control signals indicate that two or more of the busses are declared active busses. (col.3, lines 34-53), (col.5, lines 21-51)

As per claim 29, Smith discloses wherein the slave devices are further configured to generate alternate control signals when the control signals indicate that two or more of the busses are declared active busses and select of the busses using the alternate control signals. (col.5, lines 21-34)

As per claim 30, Smith discloses wherein the slave devices are further configured to generate alternate control signals when the control signals indicate that two or

more of the buses are declared active buses and select one of the buses using the alternate control signals. (col.5, lines 21-51), wherein if there is no high priority assert normal signal maintaining control of bus implies configured to other alternate signals)

As per claim 31, Smith discloses wherein the slave devices are configured to select one of the buses using the alternate control signals. (col.5, lines 21-51)

Response to Arguments

3. Applicant's arguments filed on 10/7/03 have been fully considered but are moot in view of the new ground(s) of rejection.

a. In response to applicant's argument that Kondo does not disclose or suggest a plurality of master devices and at least one slave that includes conflict resolution logic that generates the one or more alternate control signals in response to the conflict indication signal in a multi-master system. Wherein Smith discloses bridge provides devices attached to bus; when operation is received from one of the devices, bridge identifies the target; bridge translates an operation from the protocol used by source device or bus to target device or bus. (col.3, lines 34-43). Thus, the prior art teaches the invention as claimed, therefore are moot in view of the new ground(s) of rejection.

Conclusion


4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kim Huynh whose telephone number is (703)305-5384 or via e-mail addressed to [kim.huynh3@uspto.gov]. The examiner can normally be reached on M-F 8:30AM- 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on (703) 305-4815 or via e-mail addressed to [mark.rinehart@uspto.gov]. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9306 for regular communications and After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)306-5631.

Kim Huynh

Dec. 22, 2003



MARK H. RINEHART
SUPERVISOR PATENT EXAMINER
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